

Trends in Utility Green Pricing Programs

Lori Bird Senior Energy Analyst National Renewable Energy Lab lori_bird@nrel.gov

9th National Green Power Marketing Conference, October 4, 2004 Albany, New York

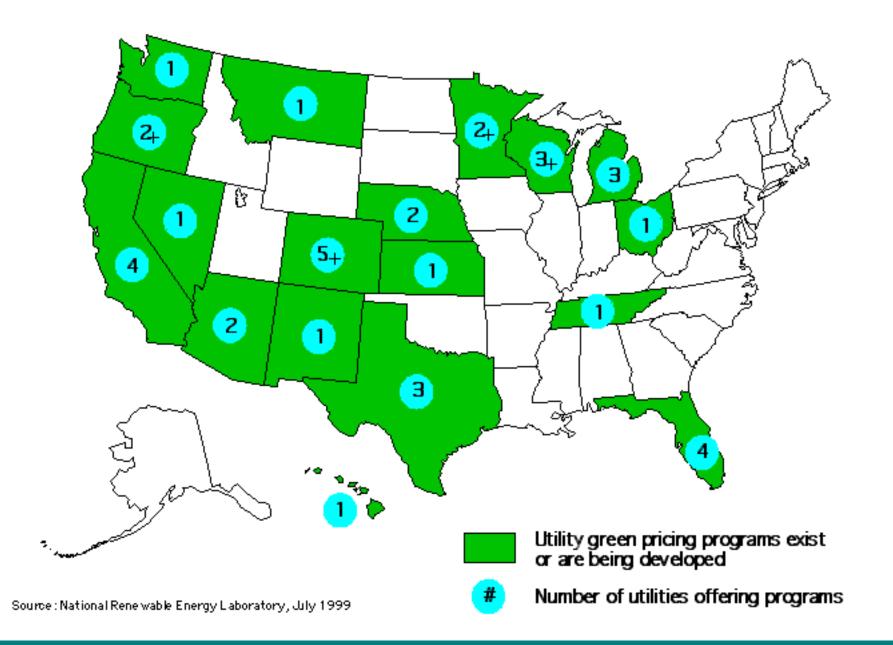




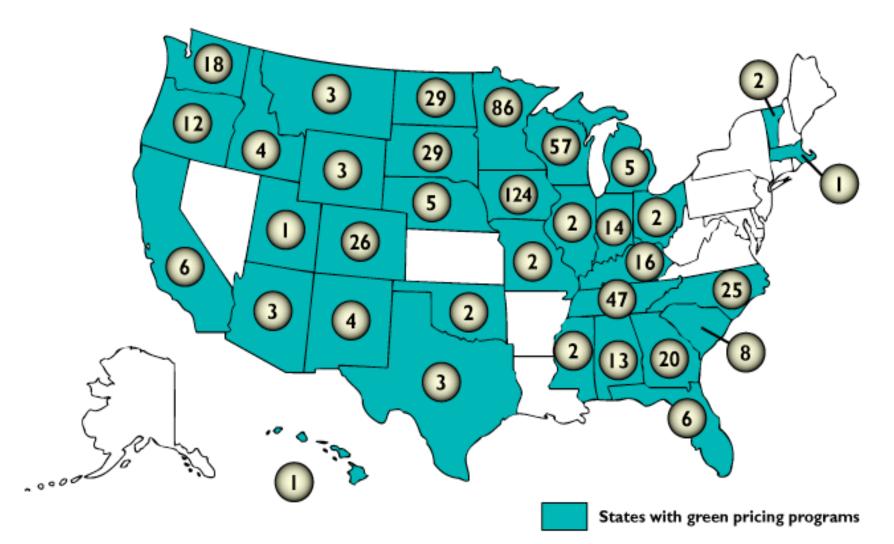
Availability of Green Pricing Programs

- More than 500 utilities in 34 states offer or have announced green pricing programs
- 15% of utilities offer programs, compared to 10% in 2002
- More than 100 distinct programs exist
- 5 states require utilities to offer green pricing programs

Utility Green Pricing Activity

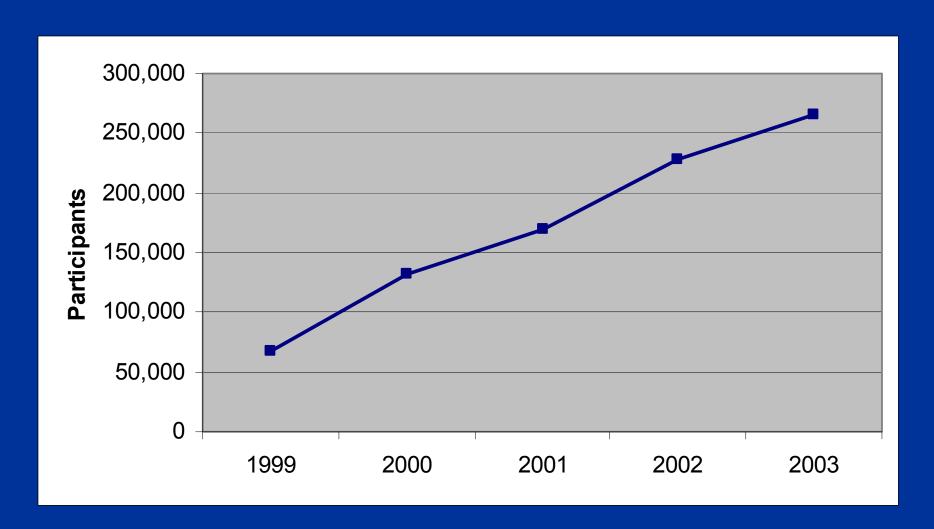


Utility Green Pricing Activities





Customer Participants in Utility Green Pricing Programs





Customer Participation

- Fourfold increase in number of customer participants from 1999 to 2003
- In 2003, 16% increase in all participants and 66% increase in nonresidential customers
- Top 10 programs account for 75% of all customers
- Retention rates dropped slightly, average of 95%+ in 2002 to 93% in 2003

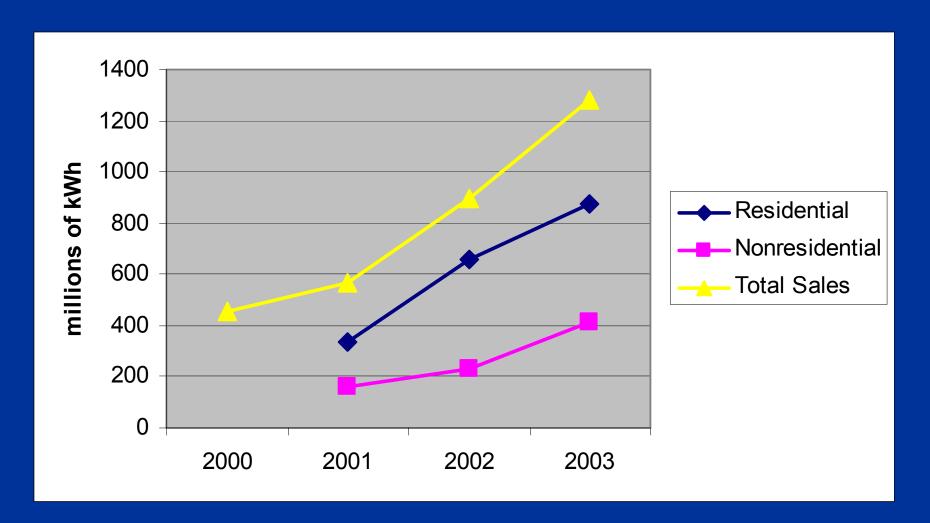


Participation Rates

- Average participation rates remained steady at 1.2%
- Most successful programs showed some improvement
 - Ranged for top 10 programs was 4% to 11% in 2003, compared to 3% to 6% in 2002
- Possible explanations for steady rates among all programs:
 - a continued lack of awareness among customers,
 - lack of sustained marketing efforts in some cases,
 - a discrepancy between what customers report in surveys and what they actually do when presented an option, and
 - the addition of new programs each year.
- Programs 4 or more years old averaged ~2%



Sales of Green Power Through Utility Green Pricing Programs



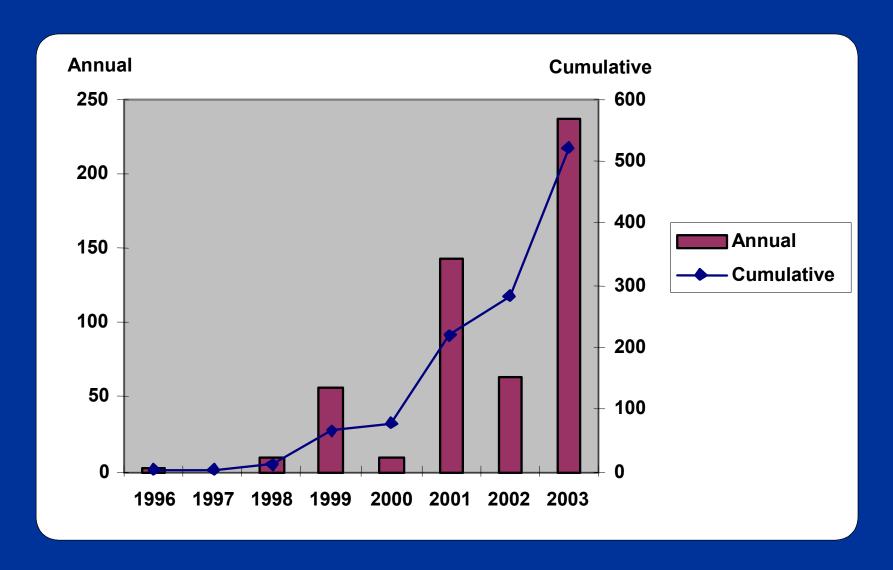


Green Pricing Sales and Revenues

- Green power sales grew by 44% in 2003
- Increase due to new participants, particularly nonresidential customers, and larger purchases
- On average, sales were 0.2% of total utility sales
 - Some programs achieved sales of as much as 3% of total utility sales
- Again, only 10 utilities account for 85% of sales
- Revenues of \$20 million for all programs, compared to \$15 million in 2002
- Residential customers spending \$5.50 on average, compared to \$4.50 in 2002

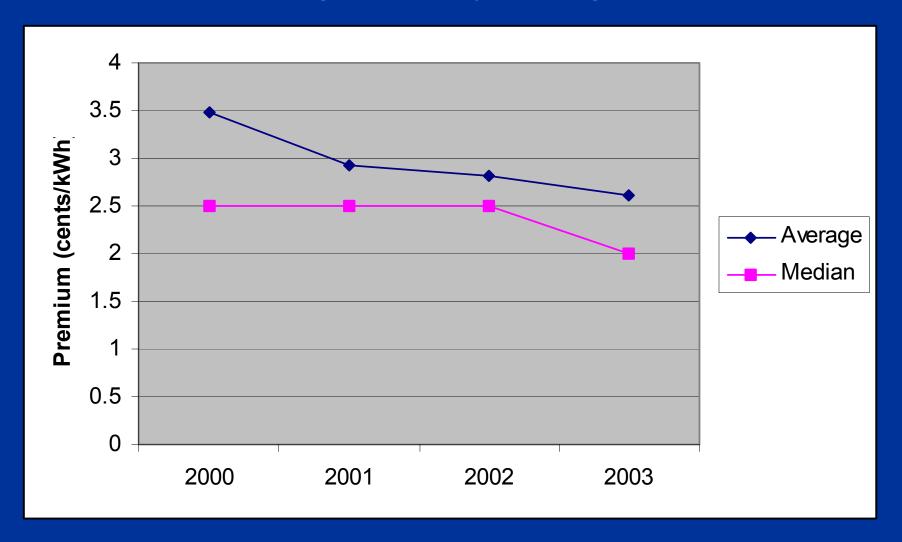


Renewable Energy Capacity Additions to Serve Green Pricing Programs (MW)





Price Premiums for Green Power through Utility Programs





Pricing

- In 2003, price premiums averaged 2.6¢/kWh (median of 2.0¢/kWh)
- Range of 0.6¢/kWh to 17.6¢/kWh, with solar-only products accounting for high end
- IOU's averaged 3.4¢/kWh compared to 2.3¢/kWh for publics and cooperatives
- 8 programs reduced their premiums in 2003
 - Most cited lower than expected costs for renewable energy Premiums varied by type of utility
- Handful of utilities offer lower premiums to nonresidential customers
- Seven utilities protected customers from fossil fuel costs



Renewable Energy Supplies

- 31% of utilities own all of the generation sources used to supply their programs
- 32% purchase power for all program supplies
- 18% purchase RECs for all program supplies
- Remainder (19%) use combination of approaches
- REC purchases represented 33% of green pricing sales, up from 11% in 2002

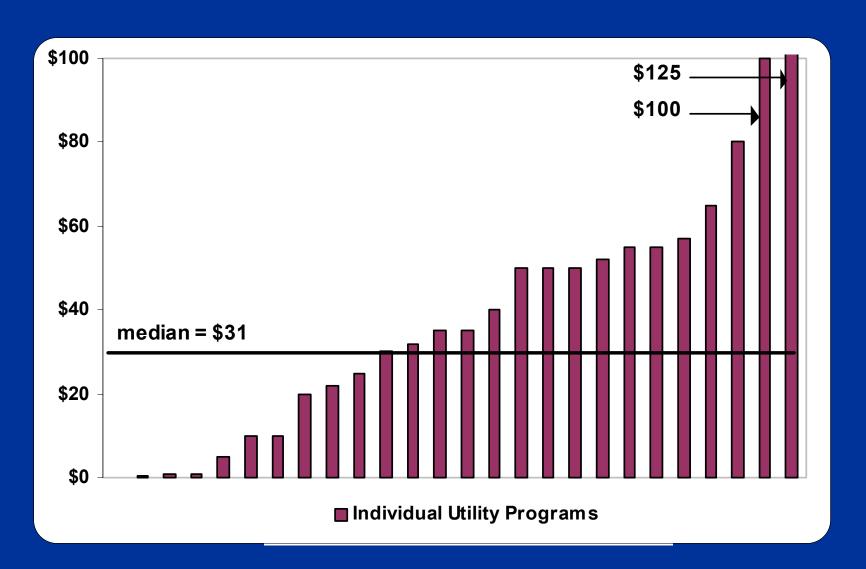


Marketing and Administrative Costs

- 5% of green pricing premium is devoted to marketing and administration (5%=median, 17%=average)
 - Top performers report median of 30% and avg of 32%
- ~60% of utilities report that some costs are <u>not</u> born by program participants
 - Some marketing and administrative costs are shared by all ratepayers
 - The program receives grants, subsidies, or contributions
 - The cost of unsold green power is spread among all ratepayers
- \$31 is median customer acquisition cost (\$36 average)
 - Small utilities reported lower customer acquisition costs, perhaps because all costs not included
 - Top performers report median customer acquisition cost of \$40



Utility-Reported Customer Acquisition Costs, 2003





Annual Marketing and Administrative Costs (Median Values)

Utility Size	Marketing Excl	Administration
	Staff Time	Incl Staff Time
<100k Customers	\$3,000	\$500
100K-499K	\$30,000	\$30,000
500K-999K	\$250,000	\$70,000
>1,000,000	\$350,000	\$87,000
All Utilities	\$16,000	\$23,000



Marketing Strategies Used by Utilities

Marketing Technique	2002	2003	<i>Top 10</i>
Bill inserts	61%	83%	87%
Utility newsletter	70%	81%	87%
Publicity	63%	64%	67%
Newspaper ads	43%	53%	60%
Direct mail	55%	48%	67%
Radio ads	37%	45%	53%
Other	32%	41%	60%
Events*	80%	24%	40%
Television ads	20%	22%	13%
Telemarketing	8%	14%	20%



Program Implementation

- 34% of programs have minimum enrollment term for residential customers
- 45% have minimum term for nonresidential customers
- 1 year is the most common minimum enrollment term
- Most programs allow customers to enroll by phone, during special events, via mail-in cards, and via the utility's Web site
- Only 12% allowed customers to enroll by checking a box on their utility bills



Market Research and Program Evaluation

- 63% of programs conducted customer research to aid the design of their program or to develop a marketing plan
 - Almost half of those conducted customer research in multiple years
- 59% of utilities conducted a program evaluation



Additional Program Benefits Provided

	2002	2003	Top 10
Newsletters	62%	64%	87%
Window decals	59%	56%	67%
Business Recognition	44%	51%	53%
Plaques or recognition	40%	49%	73%
Tours to project sites	35%	29%	33%
School programs	30%	25%	20%
Efficiency products	22%	12%	13%
Discounts/promotions	8%	12%	27%
Other	5%	12%	27%
Fuel costs exemption	11%	10%	33%



In Summary: The Good News for 2003

- Number of utilities offering programs increased from 10% to 15%
- Renewable energy sales increased by 44%
- Customer participants increased by 16%
- Customers are buying more green power
- Participation rates among top programs showed improvement, and reached 10% threshold
 - Bad news that overall participation rates remained flat
- Premiums continue to drop by about 10% per year
- 500 MW of new renewables capacity serving green pricing customers



Key Challenges for the Industry

- 1. Translating the success of a few utility programs to the remainder of the industry
- 2. Expanding options beyond 15% of utilities that currently offer programs
 - Will more states adopt green pricing policies?
- 3. Increasing consumer awareness to green power options
- 4. Can other programs achieve 10% penetration rates?
- 5. Continuing to attract large nonresidential customers
 - Competition from REC marketers increasing, may be necessary to lower premiums to compete
- 6. Offering consumers additional value
 - e.g., fuel price stability benefits



Thanks!

 Thank you to all of the utilities that provided information for this study!

 For a full version of report and other info, see <u>Green Power Network</u> web site

http://www.eere.energy.gov/greenpower



THE clearinghouse for information on the electric power industry's green power efforts.